

Appl. No. 09/998,724

Amdt. dated 1/6/06

Reply to Office action of October 12, 2005

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (withdrawn - currently amended). A method for producing a honeycomb body with channels and layers, which comprises repeating the following sequence of steps:

producing a printed layer with a first plastically deformable and subsequently consolidatable mass;

consolidating the printed layer; and

defining the channels by walls all being entirely formed by printing; and

providing at least one of a measuring sensor and a heater by at least one of applying a second electrically conductive mass and inserting an electrically conductive body into the honeycomb body.

Claim 2 (withdrawn - currently amended). A method for producing a honeycomb body with channels and layers, which comprises repeating the following sequence of steps:

Appl. No. 09/998,724

Amdt. dated 1/6/06

Reply to Office action of October 12, 2005

producing a printed layer with a plastically deformable and
subsequently consolidatable mass;

consolidating the printed layer;

~~forming walls~~ defining the channels through which a fluid can
flow by walls entirely formed by printing; and

providing one of the walls with at least one structure for
influencing the fluid.

Claim 3 (withdrawn). The method according to claim 1, which
further comprises forming walls defining the channels through
which a fluid can flow, and partially interrupting the layer
forming one of the walls to produce an orifice in the one wall
as a passage for the fluid from one of the channels to
another.

Claim 4 (withdrawn). The method according to claim 2, which
further comprises partially interrupting the layer forming one
of the walls to produce an orifice in the one wall as a
passage for the fluid from one of the channels to another.

Claim 5 (currently amended). A honeycomb body, comprising:

Appl. No. 09/998,724

Amdt. dated 1/6/06

Reply to Office action of October 12, 2005

ceramic walls all being entirely formed of printed layers forming channels through which a fluid can flow, said channels lying next to one another; and

at least one of at least one measuring sensor and an electrically conductive mass integrated into one of said ceramic walls.

Claim 6 (previously presented). The honeycomb body according to claim 5, wherein at least one of said measuring sensor and said electrically conductive mass is surrounded completely by ceramic.

Claim 7 (original). The honeycomb body according to claim 5, wherein said measuring sensor is a temperature sensor.

Claim 8 (currently amended). A honeycomb body, comprising:

at least partially ceramic walls all being entirely formed of printed layers forming channels through which a fluid can flow, said channels lying next to one another; and

at least one of said walls having a structure for influencing a throughflow of the fluid.

Appl. No. 09/998,724

Amdt. dated 1/6/06

Reply to Office action of October 12, 2005

Claim 9 (original). The honeycomb body according to claim 8, wherein said structure is disposed at least one of longitudinally, transversely and obliquely relative to a direction of the throughflow of the fluid in the channels.

Claim 10 (original). The honeycomb body according to claim 8, wherein said structure is one of wavy and zigzag-shaped.

Claim 11 (currently amended). A honeycomb body, comprising:

channels through which a fluid can flow;

a plastically deformable and subsequently consolidatable first mass being predeterminably applied in printed layers and consolidated;

at least one second mass forming another printed layer along a section through the honeycomb body next to said first mass; and

said first mass having a property different from that of said second mass; and

walls all being entirely formed of said printed layers and defining said channels.

Appl. No. 09/998,724

Amdt. dated 1/6/06

Reply to Office action of October 12, 2005

Claim 12 (canceled).

Claim 13 (original). The honeycomb body according to claim 11, including walls forming said channels, one of said walls having an orifice formed therein from one of said channels to another of said channels as a passage for the fluid.

Claim 14 (original). The honeycomb body according to claim 5, wherein the honeycomb body is formed completely of ceramic.

Claim 15 (original). The honeycomb body according to claim 8, wherein the honeycomb body is formed completely of ceramic.

Claim 16 (original). The honeycomb body according to claim 11, wherein the honeycomb body is formed completely of ceramic.

Claim 17 (previously presented). The honeycomb body according to claim 5, wherein said layers are all flat.

Claim 18 (previously presented). The honeycomb body according to claim 5, wherein the fluid can flow through said channels in a flow direction, and all of said layers are perpendicular to said flow direction.

Appl. No. 09/998,724

Amdt. dated 1/6/06

Reply to Office action of October 12, 2005

Claim 19 (previously presented). The honeycomb body according to claim 5, wherein the fluid can flow through said channels in a flow direction, and all of said layers are parallel to said flow direction.

Claim 20 (previously presented). The honeycomb body according to claim 5, wherein said layers are a multiplicity of interconnected layers disposed one on top of the other.

Claim 21 (previously presented). The honeycomb body according to claim 8, wherein said layers are all flat.

Claim 22 (previously presented). The honeycomb body according to claim 8, wherein the fluid can flow through said channels in a flow direction, and all of said layers are perpendicular to said flow direction.

Claim 23 (previously presented). The honeycomb body according to claim 8, wherein the fluid can flow through said channels in a flow direction, and all of said layers are parallel to said flow direction.

Claim 24 (previously presented). The honeycomb body according to claim 8, wherein said layers are a multiplicity of interconnected layers disposed one on top of the other.

Appl. No. 09/998,724

Amdt. dated 1/6/06

Reply to Office action of October 12, 2005

Claim 25 (previously presented). The honeycomb body according to claim 11, wherein said layers are all flat.

Claim 26 (previously presented). The honeycomb body according to claim 11, wherein the fluid can flow through said channels in a flow direction, and all of said layers are perpendicular to said flow direction.

Claim 27 (previously presented). The honeycomb body according to claim 11, wherein the fluid can flow through said channels in a flow direction, and all of said layers are parallel to said flow direction.

Claim 28 (previously presented). The honeycomb body according to claim 11, wherein said layers are a multiplicity of interconnected layers disposed one on top of the other.